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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.        | CONFIRMATION NO.       |
|---|-------------|----------------------|----------------------------|------------------------|
| 10/518,483  | 07/13/2005  | Stefan Beichl        | 038741.55710US             | 5535                   |
| 23911 7590 06/20/2007<br>CROWELL & MORING LLP<br>INTELLECTUAL PROPERTY GROUP<br>P.O. BOX 14300<br>WASHINGTON, DC 20044-4300 |             |                      | EXAMINER<br>LEE, GILBERT Y |                        |
|   |             |                      | ART UNIT<br>3673           | PAPER NUMBER           |
|   |             |                      | MAIL DATE<br>06/20/2007    | DELIVERY MODE<br>PAPER |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

|                              |                               |                               |  |
|------------------------------|-------------------------------|-------------------------------|--|
| <b>Office Action Summary</b> | Application No.<br>10/518,483 | Applicant(s)<br>BEICHL ET AL. |  |
|                              | Examiner<br>Gilbert Y. Lee    | Art Unit<br>3673              |  |

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 June 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 and 3-6 is/are pending in the application.
- 4a) Of the above claim(s) 6 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-5 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. The amendment filed 6/5/07 has been entered.
2. Upon further consideration, prosecution has been re-opened and a new **Non-Final Action** on the merits is below:

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1 and 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoffelner et al. (DE Patent No. 3,507,638) in view of Ingistov (US Patent No. 5,961,279).

Regarding claim 1, the Hoffelner et al. reference discloses a sealing arrangement (Fig. 1c) for sealing a gap between two components (Fig. 1c) which can move rotationally with respect to one another about a common axis (e.g. axis of conical shaft in Fig. 1c), having a brush seal (e.g. 4) that interacts with a sealing surface (e.g. surface of conical shaft in Fig. 1c in contact with brush seal) of the second component, wherein the sealing surface is a surface of a shaft end of the second component which is conical

in form (Fig. 1c), including a brush seal having a first and second backing plate (Fig. 1c).

However, the Hoffelner et al. reference fails to explicitly disclose a first component, the first component being axially displaceable and adjustable with respect to the second component, the first component being disposed axially adjacent to the second component shaft end, and means for axial displacement and adjustment being provided between the first component and a casing surrounding the first component.

The Ingistov reference, a brush seal arrangement, discloses a first component (e.g. including 48 and 50 or 32'), the first component being axially displaceable and adjustable with respect to the second component (e.g. through fastener 50, or through element 32' and the channel which it rests in), the first component being disposed axially adjacent to the second component shaft end (Fig. 4), and means for axial displacement and adjustment (e.g. 50 or through element 32' and the channel which it rests in) being provided between the first component and a casing (e.g. 32' or 18) surrounding the first component.

It would have been obvious to one of ordinary skill in the art at the time of the invention to provide a first component and axial displacement and adjustment means to the Hoffelner et al. reference in view of the teachings of the Ingistov reference in order to provide an arrangement in which the brush seal can be replaced easily.

Regarding claim 3, the Hoffelner et al. reference, as modified in claim 1, discloses the means for axial displacement and adjustment comprising a sliding seat

Art Unit: 3673

(Ingistov, e.g. 54), an adjustment nut (e.g. 32') which is fitted into the casing (18) and a displacement screw thread (e.g. threads on element 50) cut into the first component.

Regarding claim 4, the Hoffelner et al. reference, as modified in claim 1, discloses the axial displacement being controlled by at least one threaded connection (e.g. 50 and threads in element 32') between one of the components (e.g. 48) and a casing (e.g. 32') which receives said component.

Regarding claim 5, the Mayr et al. reference discloses the axial displacement being controlled by a mechanical adjuster (e.g. 50).

### ***Response to Arguments***

4. Applicant's arguments with respect to claims 1 and 3-5 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gilbert Y. Lee whose telephone number is 571-272-5894. The examiner can normally be reached on 8:00 - 4:30, M-F.

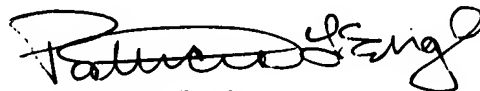
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patricia L. Engle can be reached on (571)272-6660. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3673

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

GL

June 18, 2007

A handwritten signature in black ink, appearing to read 'Patricia Engle', with a stylized flourish at the end.

Patricia Engle  
Supervisory Examiner  
Tech. Center 3600